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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,713	09/16/2005	Tomoyuki Obara	270450US0PCT	9306
22850	7590	10/30/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER RIOS, LORRAINE	
			ART UNIT	PAPER NUMBER
			4151	
			NOTIFICATION DATE	DELIVERY MODE
			10/30/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/530,713	Applicant(s) OBARA ET AL.	
	Examiner LORRAINE RIOS	Art Unit 4151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
 4a) Of the above claim(s) 2, 11, 13, 15, 17 and 19-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 12, 14, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 1, 3, 12 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/08/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/28/2005, 07/18/2007 and 08/28/2008.

DETAILED ACTION

Election/Restrictions

The election of Group 1, Species 1: claims 1, 3 12, 14, 16 and 18 drawn to an injection molding process have been acknowledge.

Claim Objections

1. Claims 1, 3, 12 and 14 are objected to because of the following informalities: the claims are unclear because the square brackets mean deletion. For purpose of a compact prosecution examiner will examine the pending claims taking into account these limitations. Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. Claims 1, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0623448 (hereafter EP '448, made of record by the applicant).

3. Regarding claim 1, the preamble is not deemed to give patentable weight to the claimed method since it only recites the purpose of the process and the process steps are able to stand alone. (See MPEP Ch. 701)

4. Regarding claim 1, EP '448 teaches an injection molding process comprising charging (injection) the molten resin into the die (mold cavity) for shaping purpose when the die surface is heated to a temperature below the softening temperature of the resin to a temperature above the softening temperature of the resin (page 5, lines 20-27). And cooling down the die to below the softening temperature to remove the molded product (page 5, lines 27-30).

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5. Note that while EP '448 does not explicitly teach the claimed range of softening point minus 20°C to softening point plus 20°C of the resin or the range of softening point minus 20°C to less than a melting point, the discovery of an optimum range is well known within the level of ordinary skill in the art, and such ranges will not support patentability absent a showing to the contrary, as it is not inventive to discover an optimum range by routine experimentation. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

6. It would have been obvious for one of ordinary skill in the art at the time of the invention to use EP '448 teachings for the benefit of an easy molding step by improving the resin fluidity for the purpose of obtaining a resin molding containing the desired properties.

7. Regarding claim 12, EP '448 teaches all of the above as explained for claim 1.

8. Note that while EP '448 does not explicitly teach the claimed range of softening point minus 10°C to softening point plus 10°C of the resin or the range of softening point minus 20°C to less than a melting point, the discovery of an optimum range is well known within the level of ordinary skill in the art, and such ranges will not support patentability absent a showing to the contrary, as it is not inventive to discover an optimum range by routine experimentation. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

9. It would have been obvious for one of ordinary skill in the art at the time of the invention to use EP '448 teachings for the benefit of an easy molding step by improving

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the resin fluidity for the purpose of obtaining a resin molding containing the desired properties.

10. Regarding claim 18, EP '448 teaches a resin molding (molded article) manufactured by the molding method of claim 1 (page 5, lines 20-30).

11. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0623448 (hereafter EP '448, made of record by the applicant) as applied to claim 1 above, and further in view of EP 1142689 (hereafter EP '689, made of record by applicant).

12. Regarding claim 3 and 14, EP '448 teaches all of the above as explained for claim 1. EP '448 further teaches that the mold cavity still been heated while the resin is in contact with it for the benefit of allowing the resin to conform the mold surface (see page 3, lines 18-22).

13. What EP '448 does not teach is the temperature ranges of the die depending on the crystallization temperature, when the resin is crystalline.

14. However in the same field of endeavor pertaining to molding of a resin material, EP '689 teaches a molding process with the die (mold surface) temperatures falls between the crystallization temperature minus 10°C to crystallization temperature plus 10°C of the resin (see paragraph [0026], lines 23-25) for the benefit of shortening the molding cycle.

15. Note that while EP '689 does not explicitly teach the claimed range of crystallization temperature minus 15°C to crystallization temperature plus 10°C of the resin, or range of the crystallization temperature minus 10°C to crystallization

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temperature of the crystalline resin, the discovery of an optimum range is well known within the level of ordinary skill in the art, and such ranges will not support patentability absent a showing to the contrary, as it is not inventive to discover an optimum range by routine experimentation. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

16. It would have been obvious for one with ordinary skill in the art at the time of the invention to combine EP '448 teachings with those of EP '689 for the benefit of held the die temperature between a range for a period of time for a better and easy method to produce resin moldings of crystalline resins that has the desire properties in a short molding cycle.

17. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0623448 (hereafter EP '448, made of record by the applicant) as applied to claim 1 above, and further in view of EP 0364803 (hereafter EP '803, made of record by applicant).

18. EP '448 teaches all of the above as explained for claim 1. What EP '448 does not teach is the resin composition containing not less than 10%wt to not exceeding to 25%wt of the fibrous filler.

19. However, in the same field of endeavor pertaining to injection molding EP '803 teaches a resin composition for injection molding containing 20-70%wt of fiber or filler (page 2, lines 41-45), with the rest being resin for the benefit of an improved and high quality product.

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It would have been obvious for one of ordinary skill in the art at the time of the invention to combine EP '803 teachings with those of EP '448 for the benefit of obtain a high quality injection molded resin that does not have lifted fibers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LORRAINE RIOS whose telephone number is (571)270-7008. The examiner can normally be reached on Monday through Friday with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on 571-272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

L.R.

***/Angela Ortiz/
Supervisory Patent Examiner, Art Unit 4151***